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## Antioxidant Activity of Wheat Sprouts Extract *In Vitro*: Inhibition of DNA Oxidative Damage

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### KEYWORDS

wheat sprouts • antioxidants • chemiluminescence • DNA damage

### ABSTRACT

**ABSTRACT:** Wheat sprouts contain a remarkable level of various antioxidants. A fraction containing high amounts of powerful antioxidant glycoside molecules has been isolated. In a dose-dependent manner, this fraction reduces the lucigenin-amplified chemiluminescence produced by the superoxide anion generated from the xanthine/xanthine oxidase system, thus indicating a superoxide-scavenging activity. A protective effect of this wheat sprouts fraction on the oxidative damage of pBR322 plasmid DNA induced by Fenton reaction ( $\text{Fe}^{2+}/\text{H}_2\text{O}_2$ ) was subsequently demonstrated. Moreover, the results reported here show that the amount of antioxidant compound strongly increases during the germination phase, while scanty present in the wheat germ, and virtually absent in the young wheat plant.

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